September

Labor Day Holiday Safety

Eye Safety Month

School Bus Safety

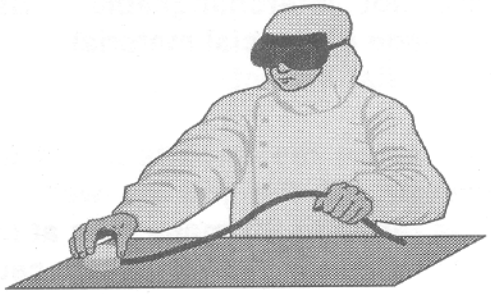
Deer Strikes

Respiratory Protection

SAFETY EYEWEAR

An eye injury can occur in an instant, but the results can last for the rest of your life.

Think what it would be like to be blinded in a work place accident, just because you decided not to put on your eye protection. You would regret that decision every day for the rest of your life.



A seemingly minor burn or a cut can be disastrous when it involves your eyes. A piece of metal flying off a grinder might be barely noticed if it strikes another part of your body. But if it strikes your eye it could cause permanent vision impairment. A chemical splash on your skin might cause a painful burn but it would eventually heal. If that splash went into your eyes, you might never see again.

These injuries can be prevented, by working safely and wearing the required Personal Protective Equipment (PPE) for the eyes.

The eyes are subjected to many kinds of dangers ar work. Here are just a few:

- Small particles in the air.
- Projectiles from processes such as grinding and cutting.
- Blows and impact.
- Cuts.
- Vapors.
- Hot or molten material.
- Splashes of chemicals such as corrosives.
- Certain light rays such as those from welding equipment or even excessive sunlight.

Ask your supporting safety office to help choose the right kind of eye protection for your work. You might require safety eyeglasses with side shields, or protective goggles. You could need filtered lenses to keep out harmful rays. You might require a face shield to cover all of your face, or a hood to cover your entire head. Possibly, you should wear a combination of these types of eye protection. It all depends on the kind of work you will be doing and the sorts of hazards which you will face.

It is also important to get the right fit. Correct fit will ensure that the safety eyewear protects the way that it should. Correct and comfortable fit will also help you to wear your eye protection when you should.

Today's safety eyewear is available in many styles and frame colors and looks as good a regular eyewear, but that's where the similarity ends. Safety glasses and street glasses are not interchangeable. Safety eyewear is made of special material designed to resist impact.

Don't forget about the importance of using safety eyewear off the job as well. Eye protection is required for many jobs at home such as woodworking and using caustic cleaning products. Many kinds of sports also require eye protection.

Never lose sight of the importance of eye protection. Obtain the correct safety eyewear, and, most of all, remember to wear it.

Susie Ashby
Installation Safety Division

EYE SAFETY

Avoiding Eye Injuries

Wear the appropriate protective eyewear for the specific hazards you face.

Of all of our senses, the one most precious perhaps is our sense of sight. Yet each year, thousands of us suffer eye injuries that impair our vision or deprive us of our sight altogether. These injuries are, to a large extent, avoidable. In fact, over 90% of all eye injuries can be prevented by following established safety guidelines and using the appropriate protective eyewear for the tasks we perform.

Recognizing Eye Hazards

Among the most common eye hazards are flying particles, a hazard typical of many machine operations such as grinding, sawing, etching, and so on. Dusts (such as wood, metal, and other airborne particles), sparks (common in welding), and fumes and splashes (from molten materials or chemicals) can all cause eye injury unless the appropriate protective eyewear is used. Harmful light rays (common in arc and electrical welding, furnace operations, and work using acetylene equipment) can cause painful eye burns unless your eyes are adequately protected. The following guidelines for on-the-job eye safety can help you save your sight—for life.

Eye Safety Checklist

- ❑ Be alert to the eye hazards present at your worksite.
- ❑ *Wear* the appropriate protective eyewear—glasses, goggles, and/or hoods, face shields and welding helmets—provided by your employer for the specific hazards you face.
- ❑ Remember that regular eyeglasses or contact lenses *will not* protect you from eye hazards—if you must wear corrective lenses, you'll need to wear protective eyewear over them.
- ❑ Check to see that your protective eyewear meets ANSI (American National Standards Institute) standards.
- ❑ Make sure that your protective eyewear fits properly and is clean and in good condition before and after each use.
- ❑ Replace faulty eyewear immediately.
- ❑ Follow established safety guidelines.
- ❑ Learn basic first-aid for eye injuries.
- ❑ Know where all eyewash stations and emergency equipment are located.
- ❑ In the event of eye injury, get medical attention immediately.

CHOOSING AND USING EYE PROTECTION

Safety Glasses And Goggles

No matter where we work, flying particles, dusts, fumes, vapors or harmful rays are apt to expose us to potential eye injury. Fortunately, we can protect against these hazards by using the appropriate protective eyewear for our jobs and by following our companies' established safety guidelines. The following is a guide to the most common types of protective eyewear and the specific hazards they can guard against.

Safety Glasses

Standard safety glasses look very much like normal glasses, but are designed to protect you against flying particles. Safety glasses have lenses that are impact resistant and frames that are far stronger than regular eyeglasses. Safety glasses must meet the standards of the American National Standards Institute (ANSI). (Safety glasses are also available in prescription form for those persons who need corrective lenses.) Standard safety glasses can be equipped with side shields, cups, or tinted lenses to offer additional protection.

Safety Goggles

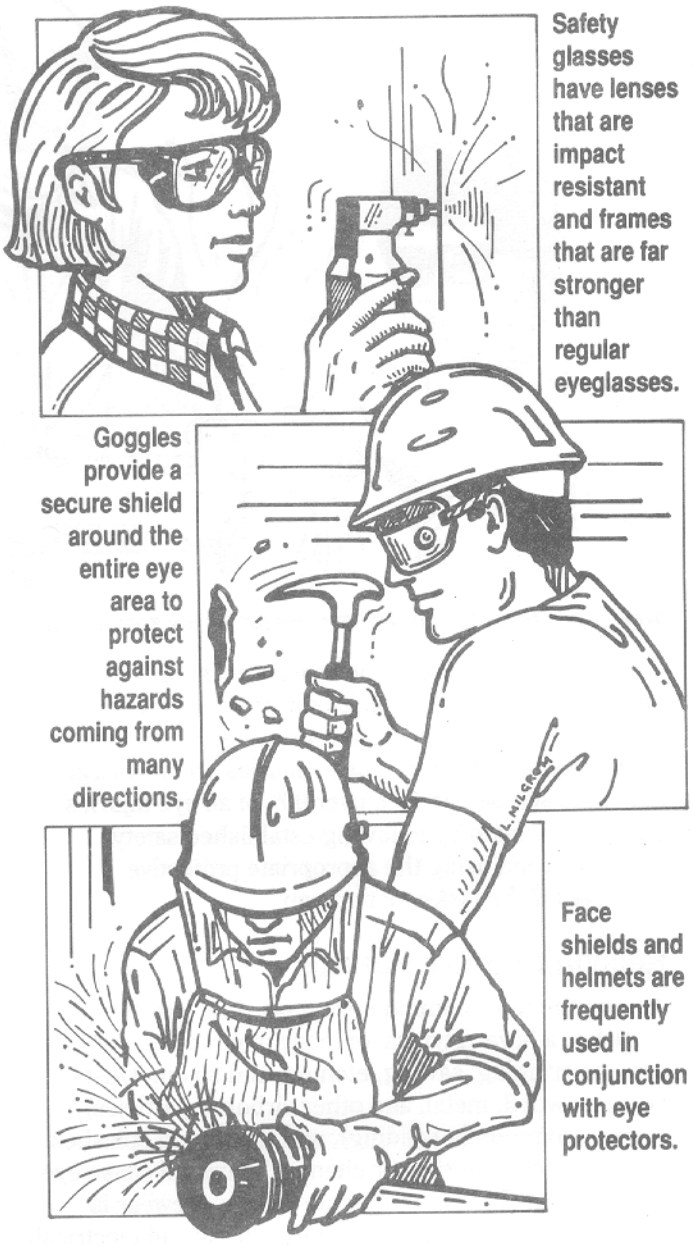
Like standard safety glasses, goggles are impact resistant and are available in tinted lenses. Goggles provide a secure shield around the entire eye area to protect against hazards coming from many directions. Safety goggles may have regular or indirect ventilation. (Goggles with indirect ventilation may be required if you are exposed to splash hazards.)

Shields and Helmets

Face shields and helmets are not in themselves protective eyewear. But, they are frequently used in conjunction with eye protectors. Full-face shields are often used when you are exposed to chemicals or heat or glare hazards. Helmets are used when welding or working with molten materials.

Using Protective Eyewear

You can guard against eye injury by making sure that you are wearing the appropriate protective eyewear for the particular eye hazards you face. It's important to remember that regular glasses alone do not offer protection from eye hazards. Follow your company's established safety procedures, and never hesitate to ask your supervisor if you have any questions about what you can do to protect your sight for life.



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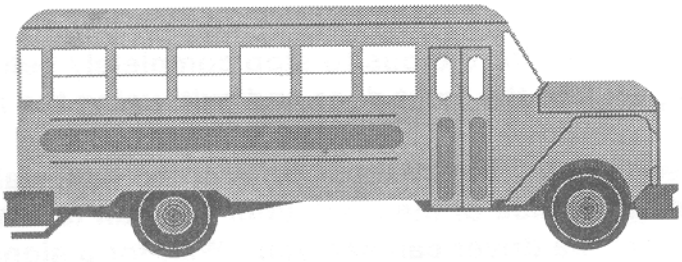
SCHOOL BUS SAFETY



For some 24 million students nationwide, the school day begins and ends with a trip on a school bus. Unfortunately, each year many children are injured and several are killed in school bus accidents.

According to the National Safety Council estimates, school bus transportation accidents killed approximately 110 persons during recent school years, 31 percent of which were students. Of those students killed, approximately one third were passengers on school buses while the remaining two thirds were pedestrians either approaching or leaving a loading zone. About half of the pupil pedestrian victims were struck by the school bus which they were entering or leaving.

Injuries in school bus related accidents for recent school years totaled about 15,000. Approximately half of the injuries were sustained by students who were pedestrians.

Although drivers of all vehicles are required to stop for a school bus when it is stopped to load or discharge passengers, children should not rely on them to do so. Parents are encouraged to teach their children these rules for getting on and off the school bus.

--When waiting for the bus, stay away from traffic and avoid roughhousing or other behavior that can lead to carelessness. Do not stray onto street, alleys or private property.

--When the school bus approaches, line up away from the street or road. Wait until the bus has stopped and the door opens before stepping onto the roadway.

--When stepping onto the bus, use the hand rail.

--When on the bus, find a seat and sit down. Loud talking or other noise can distract the bus driver and is not allowed. Never put head, arms or hands out of the window.

--Keep aisles clear. Books or bags are tripping hazards and can block the way in an emergency.

--Before you reach your stop, get ready to leave by getting your books and belongings together.

--At your stop, wait for the bus to stop completely before getting up from you seat. Then, walk to the front door and exit, using the hand rail.

--If you have to cross the street in front of the bus, walk at least ten feet ahead of the bus along the side of the road, until you can turn around and see the driver. Make sure that the driver can see you. Wait for a signal from the driver before beginning to cross. When the driver signals, walk across the road, keeping an eye out for sudden traffic changes.

--Do not cross the center line of the road until the driver has signaled that it is safe for you to begin walking.

--Stay away from the bus' rear wheels at all times.

Parents need to review with their children the correct way to cross the street. Children should always stop at the curb or the edge of the road and look left, then right, and then left again before crossing. They should continue looking in this manner until they are safely across. If students' vision is blocked by a parked car or other obstacle, they should move out to where drivers can see them and they can see other vehicles--then stop, and look left-right-left again.

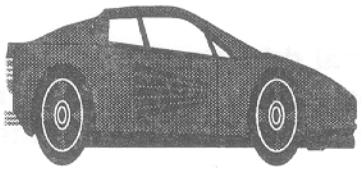
STAY ALERT -- STAY ALIVE

By: Susie Ashby
Safety and Occupational
Health Specialist
Installation Safety Division

ANIMALS ON THE ROAD

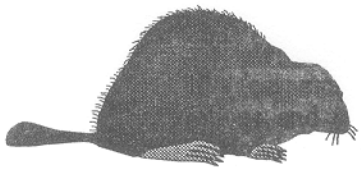
Our nation's rural highways are posted with many types of caution signs warning motorists of possible dangers. Steep hills, sharp curves, and changing road conditions are all important warnings that most motorists heed. In addition to these rather predictable situations is one of the biggest inherent dangers in rural areas. That is the sudden appearance of an animal on the roadway.

Consider the risks associated with deer, livestock and other animals while travelling the rural roadways. Most states report between one and five percent of motor vehicle accidents involve hitting an animal. Nationwide, these animal/vehicle accidents cause thousands of injuries and hundreds of deaths each year. For example, in California, out of 4,298 animal/vehicle accidents, there were 644 personal injuries and 8 deaths. In Pennsylvania, out of 1,509 such accidents, there were 531 personal injuries and 5 deaths. In Indiana, which represents the midsection of the country, 9,988 accidents involving animals and cars were recorded. Out of those accidents, 406 personal injuries were reported with 2 fatalities. In most states, one or more fatalities results from animal/vehicular accidents each year.



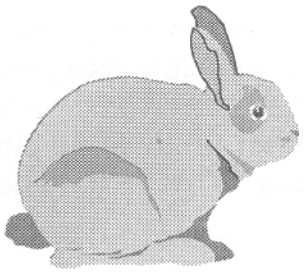
Additionally, millions of dollars are lost due to property damage. Although most insurance companies cover such losses, consider the inconvenience of being without a car for the length of time required to repair the damage. Then, too, think of the deductible and cost of rental vehicles.

More wildlife is killed by vehicles than hunters nationwide. Programs are underway to help stop this serious and wasteful loss of wildlife. Underpasses and walkways are being engineered into today's highway systems. More signs to alert motorists to certain high risk areas are being posted along the highways in an effort to reduce animal/vehicular accidents.



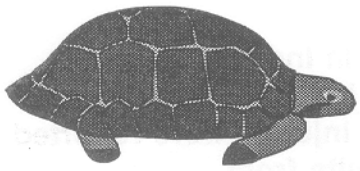
As a motorist, be alert to the warning signs that animals are in the area. When you see the road signs indicating wildlife, driving behavior should be immediately modified. Animals act on instinct and not human-type thought processes. Avoiding vehicles is not a normal behavior for an animal. They feel threatened by vehicles and act in an unpredictable manner.

Some obvious indications are seeing animals in the brush along the road, or their dropping in the roadway. Skid marks from other vehicles, or dead animals along the road tell there are animals in the area. Other indicators include vehicles in front breaking rapidly on an otherwise open roadway.



Nighttime is especially dangerous for both animal and motorist. Sight capabilities are diminished during night hours for humans, while headlights blind an animal. Nighttime indicators for motorists include flickering of headlights or taillights in front signifying something is passing between the vehicle in front and the motorist. The same is true of roadside reflectors.

When driving along high risk areas, additional driving precautions should be taken. Increase caution. Stay alert, and search both sides of the road for animals and indications of animals. Extend visual horizons as far down the roadway as possible. Be prepared to deal with an animal in the roadway at any instant. Stay aware of changing conditions that control options to maneuver a vehicle.



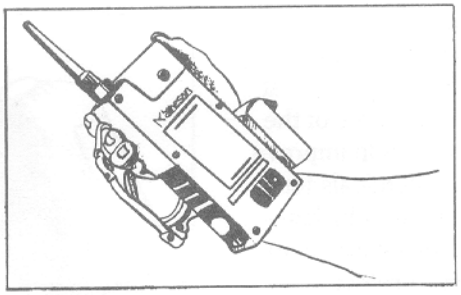
Remember, animals can't change behavior to avoid a motorist, therefore, the motorist must modify driving behavior to avoid them.

Susie Ashby
Installation Safety Division

RESPIRATORY HAZARDS

Recognition And Control

If you don't know your dusts from your mists or your fumes from your vapors, you're not the only one. Yet knowing what these common breathing hazards are can be the first step you take in guarding against them. First, it may help to understand that respiratory contaminants can be divided into two basic groups: particles and gases. How you protect yourself against a specific hazard will depend upon which type it is and how much you are exposed to.



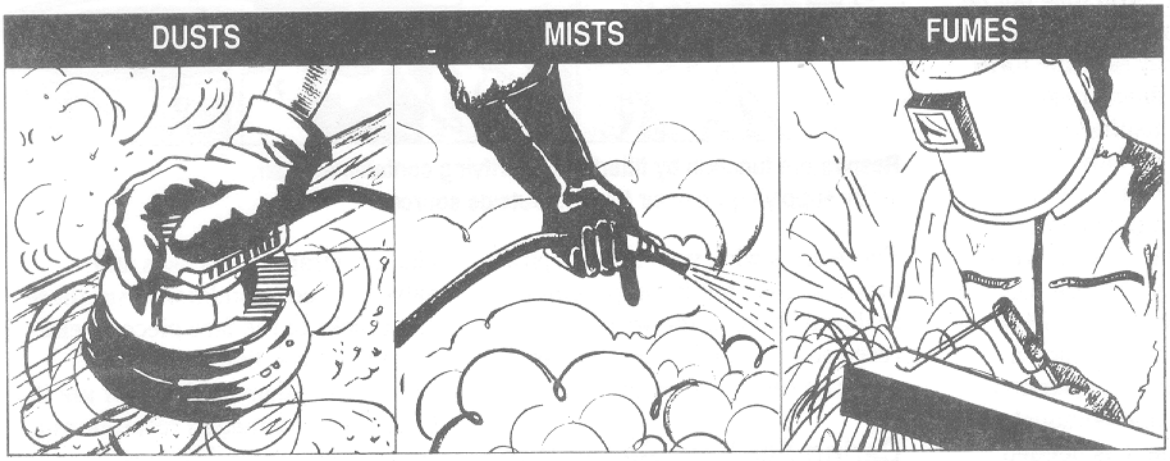
Special equipment is needed to detect gases since they often can't be seen or smelled.

Particles

A particle is simply a very tiny piece of matter. If the particle is dry it is called "dust." If it is a liquid particle, it is a "mist." And, if the particle is created by burning a material like metal, it is called a "fume." Some particles can be seen by the naked eye; others cannot. In either case, breathing in particles can clog and irritate your respiratory system.

Personal Protection

If you are exposed to any of these common respiratory hazards, at work or at home, be sure to use the appropriate respirator to protect against the hazards you face. At the worksite, your supervisor can identify the respiratory hazards in your area. Your supervisor can also advise you about the type of personal protective equipment to use. For off the job activities, consider the type of task you'll be doing—for home sanding or sawing, a disposable dust mask may filter out potentially dangerous particles. If you'll be working witn chemicals, gases, or paint, a cartridge-type respirator may be needed. If in doubt, check with your safety representative at work—he or she will be happy to advise you about off the job safety. And remember, while using the right respirator is important, your tasks may require additional personal protective equipment such as eye, hand, or hearing protection.



Dusts are dry particles; mists are liquid particles; fumes or smoke are particles created by burning matter.

Gases

Gases are substances that have no identifiable shape or form. They can't be seen and you may not even be able to smell them. Gases simply "hang" in the air around us. Some liquids, when heated, become gases called "vapors." (When you boil water, for example, the water *evaporates*—it turns into water vapor.) Gases cannot be seen by the naked eye, but many can be dangerous when breathed—they can damage not only your respiratory system, but other organs as well.

RESPIRATORY PROTECTION

A Breath Of Fresh Air

Each day, every one of us is exposed to some degree of contamination in the air we breathe—both at home and on the job. Some of the same substances that help improve our quality of life—chemicals for agriculture, fuel for our vehicles—can be toxic when we inhale them. Fortunately, you can protect yourself against respiratory hazards by following established safety guidelines and using appropriate personal protective equipment (respirators) when needed.

Respiratory Hazards

Unlike many other dangers, respiratory or breathing hazards, are often invisible. You may not be able to see, feel, or smell them. These hazards may take the form of smoke, fumes, dusts, mists, gases, vapors, or insufficient oxygen supply. The only way to determine the existence of these hazards is through thorough, periodic measuring. If your work exposes you to any of these hazards, your employer can provide environmental controls (such as ventilation and exhaust systems), safety guidelines, and personal protective equipment as needed.

Clearing the Air

If your job requires that you wear a respirator, your employer will provide the type of device best suited to protect against the particular hazard you face. Respirators function by filtering or purifying contaminated air, or by supplying fresh air from an outside source.

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There are a wide variety of respirators available, but it's important to realize that using the wrong respirator can be just as risky as using no respirator at all.

Caring For Your Respirator

Like any piece of equipment, your respirator requires care and upkeep in order to function correctly. Most manufacturers will provide cleaning and storage instructions for their particular product. Follow the manufacturer's guidelines carefully. Be sure to inspect your respirator before and after each use. Does the filter need to be replaced? Are all clamps, straps, harnesses and valves in good condition? Are there any cracks in the face piece or elsewhere? If you find that your respirator is damaged, *do not use it.* Return your damaged respirator to your supervisor and request a replacement while yours is being repaired.

Air Care

When you care about the air you breathe, you care about respiratory protection. Don't take risks with your health and life—protect against breathing hazards for the health of it.

CHOOSING AND USING RESPIRATORY PROTECTION

Filtration, Purifying, And Air-Supplying Respirators

When you care about your health, you care about protecting your lungs from potentially harmful respiratory hazards. By following your company's safety guidelines and using respiratory protection when needed, you can help make each breath a breath of fresh air. It's important to realize, though, that using the wrong respirator can be as dangerous as using no respirator at all. The following is a guide to the most common types of respirators and the specific hazards they can protect against.

Filtration Respirators

Filtration respirators filter or "screen" out contaminants from the air you breathe. Your entire mask may be disposable, or you may be given a reusable face piece with a disposable filter. Filtration masks guard against airborne particles (such as dust) and some gases and vapors. Once the filter becomes discolored or "clogged" you must replace it.

Purifying Respirators

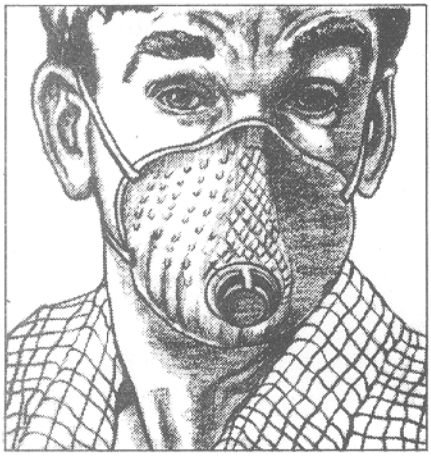
Purifying respirators contain replaceable chemical cartridges or canisters that "purify" or entrap the contaminant before you breathe it. (These respirators may also contain filtration devices.) Cartridges are color-coded depending on the particular hazard they guard against. In some cases, you may need to use more than one cartridge. (Make sure your cartridge and respirator are made by the same manufacturer.)

Air-Supplying Respirators

Air-supplying (also called supplied-air) respirators provide clean air from an outside source when there is an inadequate or highly-contaminated supply of oxygen. These respirators can either be self-contained (a portable air tank that you carry with you) or air-line (a hose attached to your hood or mask is attached to an outside air tank). The air must be "Grade D" breathing air.

Using Respirators

As with all personal protective equipment, respirators only work if you use them correctly and consistently. For face mask respirators, always make sure that your mask fits properly, that there is a tight seal and no air leakage. Be sure to wear the *appropriate* respirator for the particular hazard you face, and be sure to keep your respirator clean and well-maintained. Finally, follow your company's established safety guidelines, and never hesitate to check with your supervisor if you have any questions about your personal respiratory protection.



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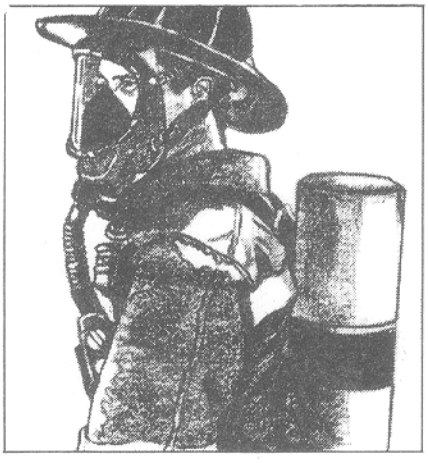

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